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(56) Documents Cited

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US 5033223 A US 5003027 A US 4650146 A
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(54) Angling stand

(57) An angling stand 10 comprises an adjustable main shaft 12 having bosses 14 at either end thereof. Two pivotally mounted arms 16 are secured to each boss 14. Each arm 16 has an opening 18 close to its free end which opening is arranged to receive a bank stick 20 of a known type. A known type of snag bar 22 can then be attached between the upper ends of adjacent bank sticks 20.

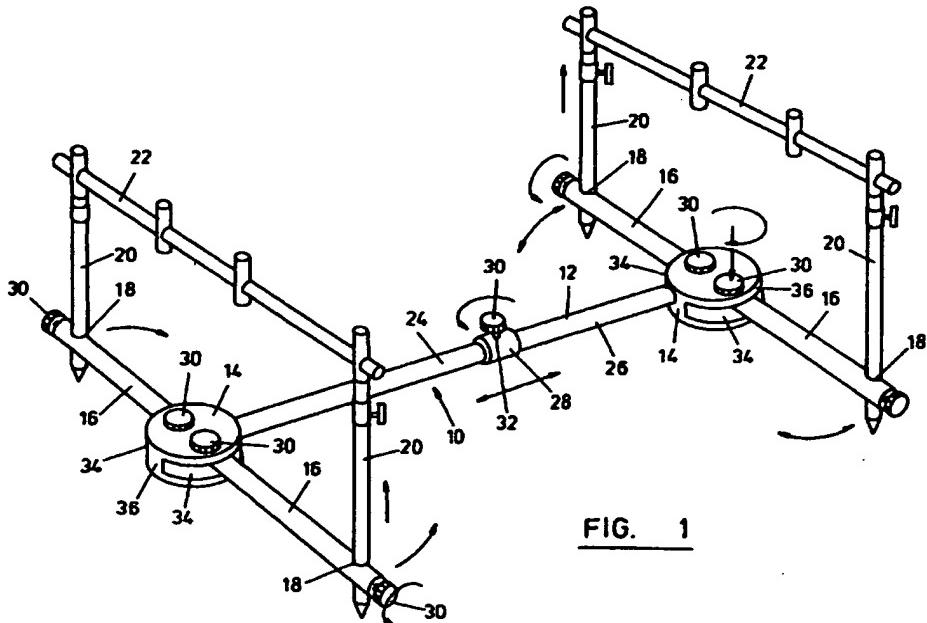
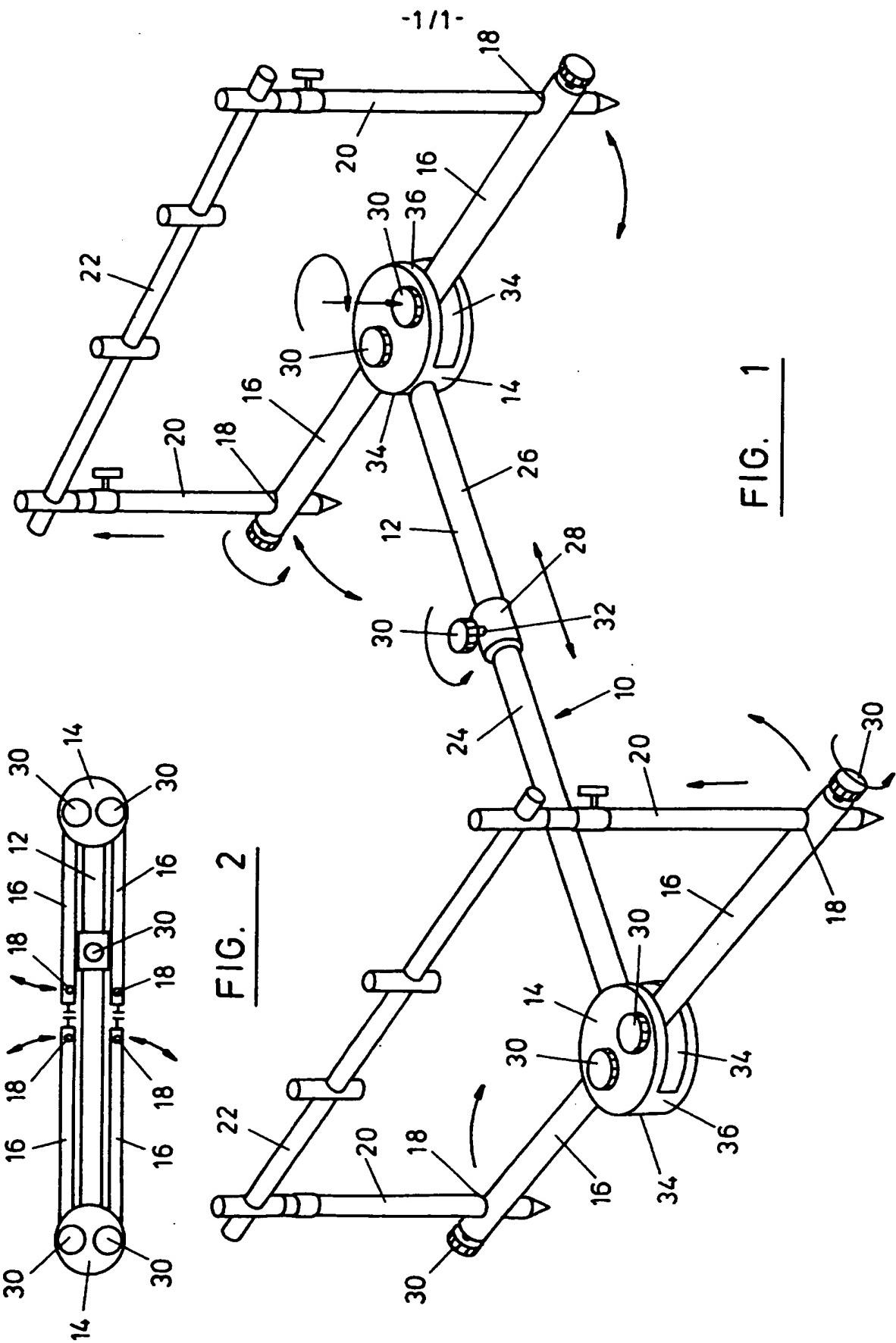


FIG. 1

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At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1995



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ANGLING STAND

This invention relates to an angling stand.

- 5 Angling stands are used to stabilise and support an angling set up. Typically, such a set up would comprise two horizontal rods, called snag bars or buzzer bars, which have butt grips arranged to grip one or more fishing rods. Each snag/buzzer bar typically has a single central support called a bank stick, which has a pointed end which can be driven into the ground.
- 10 Two snag/buzzer bars are usually used to provide two points of attachment for each fishing rod. Angling stands are used to provide additional support and stability to the bank sticks by securing the lower ends of the bank sticks and inhibiting relative movement of the bank sticks. Also, an angling stand can be used in situations where the bank sticks cannot be driven into the ground,
- 15 for instance on hard or stony ground or on a concrete or wooden jetty. In these situations the stand provides a means of securing the lower ends of the bank sticks.

- Problems arise with previous types of angling stand which support
20 snag/buzzer bars having a single bank stick, particularly when two or more fishing rods are used. In these situations, the single central support tends to become unstable when fishing rods are attached either side of the central support. This instability can lead to undesirable shaking of the angling set up and may result in unwanted tripping of buzzer alarms attached to the snag
25 bars.

It is an object of the present invention to address the above mentioned disadvantages.

According to a first aspect of the present invention an angling stand comprises a plurality of inter-connected support receiving portions arranged, in use, to receive and secure in position at least two laterally spaced supports.

5 The support receiving portions may be adjustable to receive supports having various relative spacings. Said adjustment may be achieved by a pivoting movement.

10 The support receiving portions may comprise openings in arms of the angling stand. Each arm may have a single such opening located substantially towards a first end thereof. The support receiving portions may comprise a fixing assembly located on said arm, arranged to receive said support.

A second end of each of said arms may be pivotally attached to a boss.
15 The relative spacing between support receiving portions may be adjusted, in use, by a pivoting movement of one or more of said arms.

20 The boss may, in use, constrain the pivoting movement to a single plane. The boss may include at least one slot. The slot may be arranged to receive at least one of said arms. The pivotal mounting may be located in the slot. The slot may in use constrain the pivoting movement of the or each arm to a single plane.

25 First securing means may be provided to secure, the arms in a chosen position. The first securing means may comprise an adjustable projection arranged, in use, to bear against a corresponding arm. The projection may be threaded and may be received in a correspondingly tapped opening in the boss.

Most preferably, the stand comprises two bosses. Most preferably each boss has two of said arms pivotally mounted thereon.

Where provided, the bosses may be mounted on opposite ends of a
5 shaft member, preferably in an opening in each boss. Said shaft member may be adjustable in length. Said adjustment may be a telescopic adjustment.

The support receiving portions may comprise second securing means arranged, in use, to secure the supports in the support receiving portions.
10 Said second securing means may comprise a movable projection which is arranged, in use, to extend into the opening in one of the arms and bear against said support. The projection may be threaded and may be received in a correspondingly tapped opening in the arm.

15 The angling stand may have a first configuration in which the arms are located substantially parallel and adjacent to the shaft member, and a second configuration, in which the arms are disposed at angles to the shaft member. The first securing means may be actuatable to secure the stand in either of said first and second configurations.

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An assembly comprises an angling stand according to the first aspect of the present invention and at least two snag bars, each having at least two supports received in support receiving portions of the angling stand.

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The present invention can be brought into practice in various ways, but one embodiment will now be described by way of example and with reference to the enclosed drawings, in which:

Figure 1 is a diagrammatic perspective view of an angling stand retaining bank sticks and snag bars in position; and

Figure 2 is a diagrammatic view of the angling stand in a collapsed
5 state.

An angling stand 10 comprises an adjustable main shaft 12 having bosses 14 at either end thereof. Two pivotally mounted arms 16 are secured to each boss 14. Each arm 16 has an opening 18 close to its free end, which 10 opening is arranged to receive a bank stick 20 of a known type. A known type of snag bar 22 can then be attached between the upper ends of adjacent bank sticks 20.

The angling stand 10 will now be described in greater detail. The main 15 shaft 12 comprises first and second tubes 24 and 26, which may be made of stainless steel. The first tube 24 has a larger internal diameter than the external diameter of the second tube 26. The difference in diameters between the first and second tubes 24 and 26 allows the second tube 26 to be received within the first tube 24. Relative movement of the tubes 24 and 26 allows 20 adjustment of the length of the main shaft 12. A collar 28 and a rotationally mounted hand wheel 30 are located at the end of the first tube 24 which receives the second tube 26. The hand wheel 30 includes a threaded projection 32 received in the collar 28. The hand wheel 30 can be rotated to cause the threaded projection 32 to bear against the second tube 26 and 25 thereby hold said second tube 26 in a desired position.

The bosses 14 are located at opposite ends of the main shaft 12 may be made of aluminium. Each boss has a generally disc-shaped form. Two slots

34 are formed, preferably by machining, in the curved face 36 of each boss 14. The slots 34 in each boss 14 extend less than half way around the boss. The two slots 34 are preferably located at substantially opposite sides of the boss 14 and preferably do not come into contact with each other.

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A hand wheel 30, preferably of moulded plastic, is associated with each slot 34. The hand wheels have threaded protections (not shown) which extend from the moulded hand wheel on the top face of the boss 14 through the slot 34 to an opening (not shown) in a lower portion of the boss 14. The threaded projection passes through the arm 16, an end of which is located in the slot 34. The threaded projection forms a pivot mount for the arm 16. The pivot mounting for the arm 16 permits movement of the arm 16, constrained by the slot 34. Movement about the pivot through an angle of 180° in the plane of the slot is permitted. The position of the arm 16 can be fixed by rotation of the hand wheel 30 to tighten the threaded protrusion and increase the pressure of the upper and lower portions of the slot on the arm 16.

The ends of the arms 16 remote from the bosses 14 have openings 18 therein to receive a bank stick 20. Alternatively, instead of having an opening 20 to receive a bank stick, each arm may have some form of fixing assembly to which a bank stick may be attached. A hand wheel 30 is located at the end of each arm 16 and a threaded projection is attached thereto. The threaded projection protrudes into the opening 18. Rotation of the hand wheel 30 causes the protrusion to tighten on a bank stick 20 inserted into the opening 18. Counter-rotation of the hand wheel 30 and threaded projection results in the bank stick 20 being released.

In use, the angling stand 10 is stored in a collapsed position wherein the arms 16 are pivoted about the bosses 14 to be parallel and adjacent to the main shaft 12. Thus a compact configuration is provided which is easily portable. The arms can be secured in position by actuation of the hand wheels 30.

The angling stand 10 is erected in the following way. The hand wheels 30 on the bosses 14 are loosened to allow the arms 16 to be pivoted outwards. The angle through which the arms 16 are pivoted is chosen so that the distance between the ends of the arms 16 of one of the bosses 14 corresponds to the distance which is required between bank sticks 20. Various standard sizes of snag bar are available, these may be 15 inches, 18 inches, 20 inches, 22 inches and 24 inches. However, it will be understood that any of a large number of bar sizes can be accommodated because the adjustment of distance between the ends of the arms is continuous. When the arms have been pivoted to their required relative positions the hand wheels 30 are tightened to lock the arms 16 in position.

The length of the main shaft can then be adjusted to suit the requirements of the user. Rotation of the hand wheel 30 on the main shaft 12 can be used to loosen the first and second tubes 24 and 26 which comprise the main shaft and relative motion therebetween can then be achieved. When the desired length has been selected the hand wheel 30 can then be tightened again to secure the two sections of the main shaft in position.

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When the angling stand 10 has been opened out and the arms and main shaft have been locked in position bank sticks 20 can be inserted into the openings 18 in the arms 16. A snag bar 22 can then be secured to adjacent

bank sticks 20 and fishing rods (not shown) can be attached to snag bars 20 in the known manner.

The angling stand described herein provides a particularly stable base
5 to allow a number of rods to be used with a single set up. In particular front/back stability will be increased. Benefits over prior art angling stands are that the use of four bank sticks allows an extremely stable arrangement.

Additionally, the stand can be stored and transported in an extremely
10 compact and manageable form because of the adjustment for each of the four legs. This may have particular benefits for wheelchair users.

The reader's attention is directed to all papers and documents which are filed concurrently with or previous to this specification in connection with this
15 application and which are open to public inspection with this specification, and the contents of all such papers and documents are incorporated herein by reference.

All of the features disclosed in this specification (including any
20 accompanying claims, abstract and drawings), and/or all of the steps of any method or process so disclosed, may be combined in any combination, except combinations where at least some of such features and/or steps are mutually exclusive.

25 Each feature disclosed in this specification (including any accompanying claims, abstract and drawings), may be replaced by alternative features serving the same, equivalent or similar purpose, unless expressly stated otherwise. Thus, unless expressly stated otherwise, each feature

disclosed is one example only of a generic series of equivalent or similar features.

The invention is not restricted to the details of the foregoing
5 embodiment(s). The invention extends to any novel one, or any novel combination, of the features disclosed in this specification (including any accompanying claims, abstract and drawings), or to any novel one, or any novel combination, of the steps of any method or process so disclosed.

CLAIMS

1. An angling stand comprises a plurality of inter-connected support receiving portions arranged, in use, to receive and secure in position at least
5 two laterally spaced supports.
2. An angling stand as claimed in claim 1, in which the support receiving portions are adjustable to receive supports having various relative spacings.
- 10 3. An angling stand as claimed in claim 2, in which the adjustment may be achieved by a pivoting movement.
4. An angling stand as claimed in any preceding claim in which the support receiving portions comprise openings in arms of the of the angling
15 stand.
5. An angling stand as claimed in claim 4, in which each arm may have a single such opening located substantially towards a first end thereof.
- 20 6. An angling stand as claimed in either claim 4 or claim 5 in which the support receiving portions comprise a fixing assembly located on said arm, arranged to receive said support.
- 25 7. An angling stand as claimed in any one of claims 4 to 6 in which the relative spacing between support receiving portions is adjustable, in use, by a pivoting movement of one or more of said arms.

8. An angling stand as claimed in any one of claims 4 to 7 in which a second end of each of said arms is pivotally attached to a boss.
9. An angling stand as claimed in claim 8 in which the boss, in use,
5 constrains the pivoting movement to a single plane.
10. An angling stand as claimed in either claim 8 or claim 9 in which the boss includes at least one slot.
- 10 11. An angling stand as claimed in claim 10 in which the slot is arranged to receive at least one of said arms.
12. An angling stand as claimed in claim 10 or claim 11 in which the pivotal mounting may be located in the slot.
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13. An angling stand as claimed in any one of claims 10 to 12 in which the slot, in use, constrains the pivoting movement of the or each arm to a single plane.
- 20 14. An angling stand as claimed in any one of claims 4 to 13 in which first securing means are provided to secure the arms in a chosen position.
15. An angling stand as claimed in claim 14 in which the first securing means comprises an adjustable projection arranged, in use, to bear against a
25 corresponding arm.
16. An angling stand as claimed in any one of claims 8 to 15 in which the stand comprises two bosses.

17. An angling stand as claimed in claim 16 in which each boss has two of said arms pivotally mounted thereon.
18. An angling stand as claimed in either claim 16 or claim 17, in which
5 the bosses are mounted on opposite ends of a shaft member.
19. An angling stand as claimed in claim 18 in which said shaft member is adjustable in length.
- 10 20. An angling stand as claimed in claim 18 or claim 19 which has a first configuration in which the arms are located substantially parallel and adjacent to the shaft member, and a second configuration, in which the arms are disposed at angles to the shaft member.
- 15 21. An angling stand as claimed in any preceding claim in which the support receiving portions comprise second securing means, arranged, in use, to secure the supports in the support receiving portion.
- 20 22. An angling stand as claimed in claim 21 in which the second securing means comprise a movable projection which is arranged, in use, to extend into the opening in one of the arms and bear against said support.
- 25 23. An assembly comprises an angling stand according to any one of the preceding claims and at least two snag bars, each having at least two supports received in portions of the angling stand.
24. An angling stand substantially as herein before described with reference to the accompanying drawings.



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Application No: GB 9622741.8
Claims searched: 1-24

Examiner: Kalim Yasseen
Date of search: 26 January 1998

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.P): A1A (A27)

Int Cl (Ed.6): A01K 97/10

Other:

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	GB 2 313 030 A (JAMES) see whole document especially figures	1-22
X	GB 2 294 189 A (WARD) see whole document especially figures	1-22
X	GB 2 232 567 A (WAVENEY) see whole document especially figures	at least 1
X	US 5 033 223 A (MINTER) see whole document especially figures	at least 1
X	US 5 009 027 A (LEE) see whole document especially figures	at least 1, 4, 5, 6, 8, 14
X	US 4 650 146 A (DUKE) see whole document especially figures	at least 1
X	US 4 036 368 A (MUNSCH) see whole document especially figures	at least 1

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| X Document indicating lack of novelty or inventive step | A Document indicating technological background and/or state of the art. |
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